

Rev: B1

65-C0317-MA

SOUNDSTREAM[®]
T E C H N O L O G I E S

Owner's Manual and
Installation Guide

LIL' WONDER II

LW2.240
LW4.480
LW4.580
LW5.830
LW1.350

PCB NO: 1CH 06-C0771-C0
2Ch 06-C0885-00/10;
4Ch 06-C0886-00/10/20,06-C0887-30;
5Ch 06-C0887-00/10/20/30

CONGRATULATIONS!

You now own a *Limited Edition LIL' WONDER Amplifier*, the product of an uncompromising design and engineering philosophy.

To maximize the performance of your system, we recommend that you thoroughly acquaint yourself with its capabilities and features. Please retain this manual and your sales receipt for future reference.

Soundstream amplifiers are the result of American innovation and the highest quality control standards. When properly installed, they will provide you with many years of listening pleasure. Should your amplifier ever need service or replacement due to theft, please record the following information which will help protect your investment.

Serial # _____

Dealer's Name _____

Date of Purchase _____

Installation Shop _____

Installation Date _____

CAUTION!

Prolonged listening at extremely high levels may result in hearing loss. Even though your new Soundstream Limited Edition **LIL' WONDER** Amplifier, sounds better than anything you've ever heard, exercise caution to prevent hearing damage.

FEATURES

- * VARIABLE BASSEQ. CONTROL
- * DRIVE DELAY II (2 second) CONTROL CIRCUITRY
- * THERMAL, SHORT-CIRCUIT / OVERLOAD PROTECTION SYSTEMS
- * 2 OHM STEREO STABLE / 4 OHM MONO
- * PWM MOSFET SUPPLY
- * POWER & PROTECTION INDICATORS
- * 4 - POSITION SELECTABLE CROSSOVER (Hp - Lp - Bp & Full).
- * INFINITELY VARIABLE X-OVER POINT (50 - 650)/500 - 6.5k (X10)
- * 18 db BASS BOOST @ 45 Hz (Switchable IN/OUT)
- * CROSSOVER Range SELECTOR SWITCH (Normal / x10)
- * PLATINUM TERMINAL STRIPS & RCA JACKS
- * HEAVY-DUTY (Bright) ALUMINUM ALLOY - HEATSINK
- * SOFT TURN-ON / OFF (No "pop").
- * HIGH (Speaker) OR LOW (RCA) LEVEL INPUTS.
- * PHANTOM (5th) CHANNEL FOR POWERING SUB / CENTER CHANNEL (5 Channel Model).

SPECIFICATIONS

Signal / noise Ratio	>92dB
Frequency Response $\pm 1.0\text{db}$	10Hz - 30KHz
HPF	50Hz - 650Hz
LPF	50Hz - 650Hz
Input Voltage Range	11 - 16 Volts DC
High Impedance RCA/LINE Level Input Impedance	47K Ohms

POWER RATINGS & FUSE

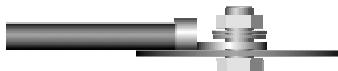
MODEL	4 ohm STEREO	2 ohm STEREO	4 ohm BRIDGED	FUSE
LW2.240	60W x 2	120W x 2	240W	30A
LW4.480	60W x 4	120W x 4	480W	30A x 2
LW4.580	75W x 4	150W x 4	600W	30A x 2
LW5.830	70W x 4+180W x 1	140W x 4+270W x 1	280W x 2+270W x 1	30A x 3
LW1.350	\	300W x 1	\	20A x 2

A Hi/Low Selector switch is also provided allowing you to choose either the low range (50Hz-650Hz) or the high range (500Hz-6.5KHz).

DIMENSIONS

MODEL	Length	Width	Height
LW2.240	200 mm	200 mm	50 mm
LW4.480	300 mm	200 mm	50 mm
LW4.580	340 mm	200 mm	50 mm
LW5.830	450 mm	200 mm	50 mm
LW1.350	300 mm	200 mm	50 mm

TOOLS / PARTS FOR INSTALLATION

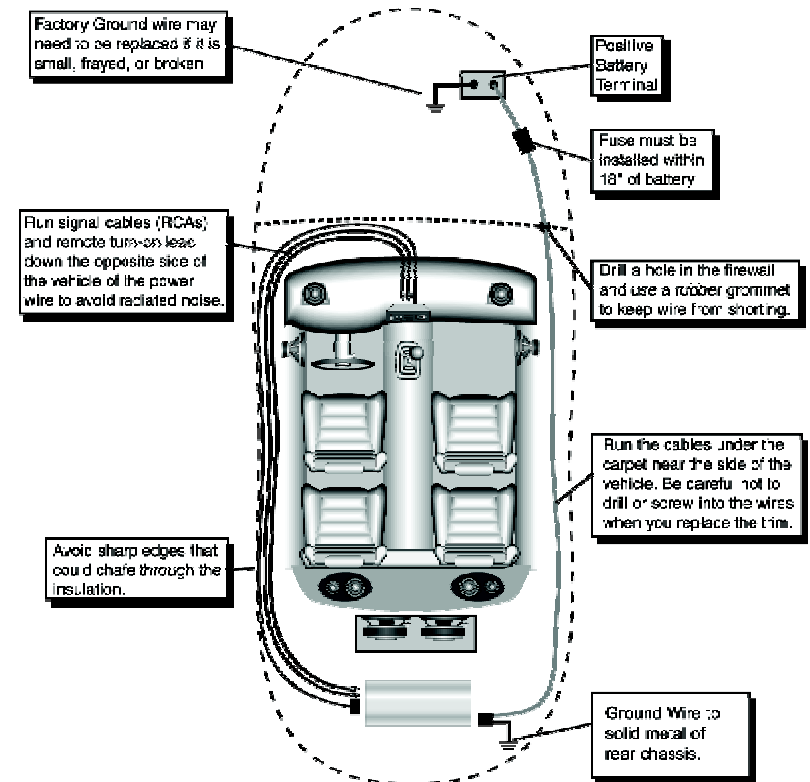


NOTE: TOOLS ARE NOT SUPPLIED

Small flat blade screwdriver phillips screwdriver (#2 or medium sized), Wire cutters Wire strippers, - #6 round head screws, and 1 - #8 sheet metal screw (or nut, bolt, flat washer, star washer) [see detail] 2 - Ring connectors (large enough to accommodate your method of grounding) In-line fuse or circuit breaker - see fuse chart below Power and ground wire - see Power Wire Calculator on page 6 Speaker wire - 12 - 16 gauge Grommets (Sized to work with the power wire you plan to use in your installation) Tube of silicone seal.

WIRING

Before beginning, disconnect the negative (-) terminal of the battery prior to working on the positive (+) terminal to prevent a short to ground. This is important, unless you want to spend the rest of your life with a nickname like "Sparky," or "Smokey." Reconnect the negative terminal only after all connections have been made.

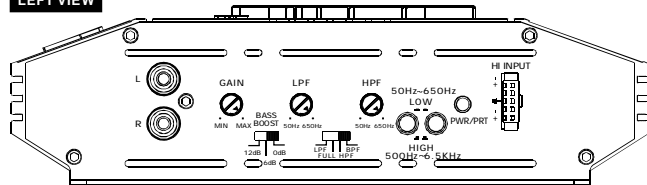


Warning! A Main Fuse must be installed within 18" of battery!

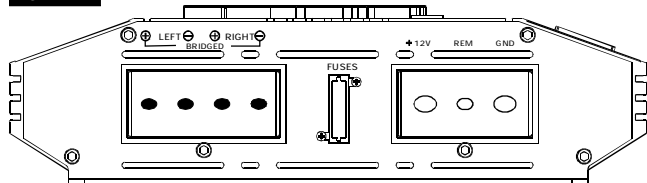
PANEL LAYOUT

LW2.240

LEFT VIEW

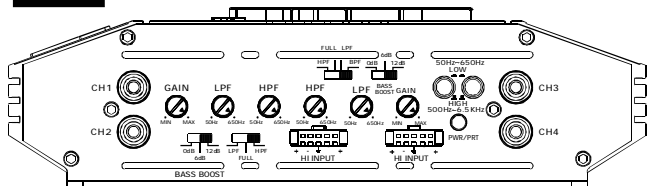


RIGHT VIEW

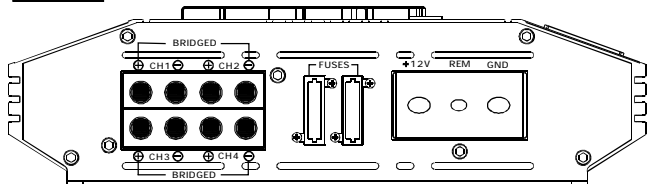


LW4.480/LW4.580

LEFT VIEW



RIGHT VIEW

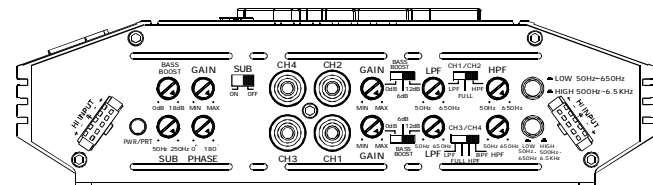


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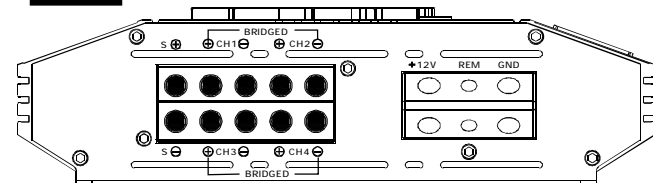
PANEL LAYOUT

LW5.830

LEFT VIEW

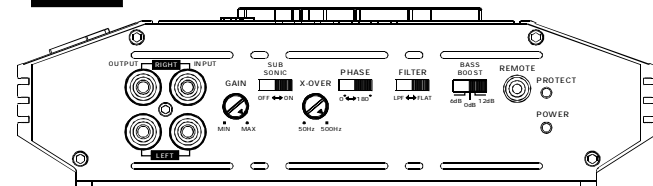


RIGHT VIEW

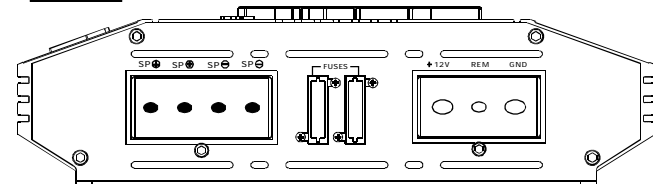


LW1.350

LEFT VIEW



RIGHT VIEW



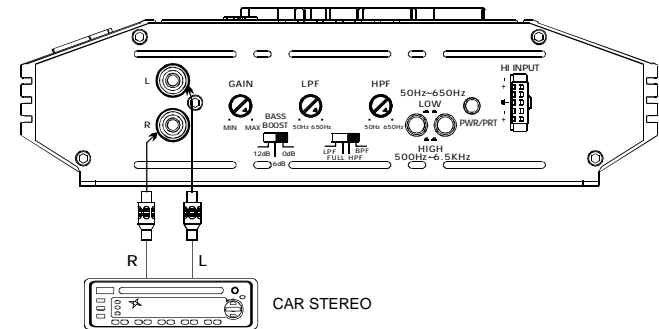
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LW2.240 / LW4.480 / LW4.580 / LW5.830 / LW1.350

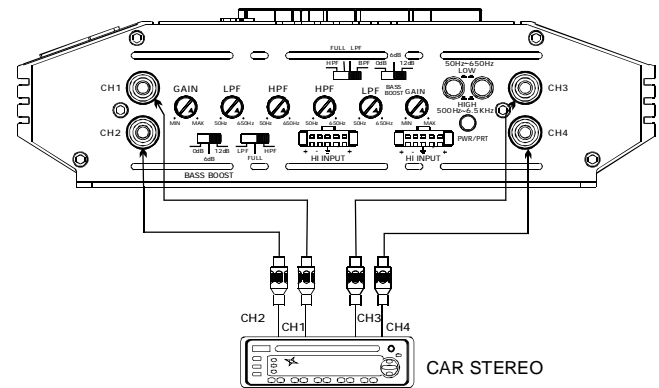
- ▶ 1 & 2 & 4 & 5 Channel power amplifier
- ▶ 4 & 8 Ohm stable in stereo mode
- ▶ MOSFET power supply
- ▶ Low level input
- ▶ Gain < input level > controls
- ▶ Bass boost Control
- ▶ Phase change 0° or 180° control(1 & 5 Channel)
- ▶ Short circuit protection
- ▶ Thermal protection
- ▶ Remote Subwoofer Control
- ▶ Sub Sonic Control(1 Channel)
- ▶ X-over Control
- ▶ Remote Turn-on/Turn-off circuit
- ▶ Protection condition LED indicator
- ▶ Power on LED indicator

INPUT MODE

2 CHANNEL

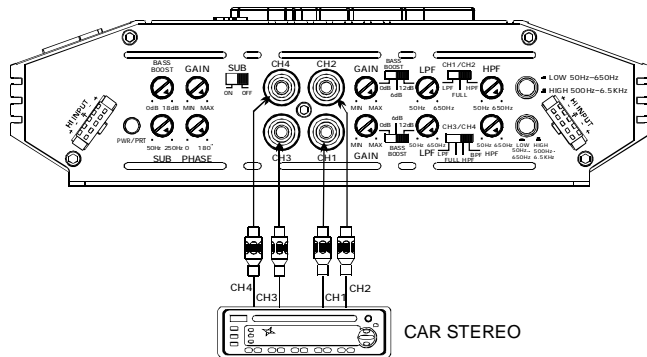


4 CHANNEL

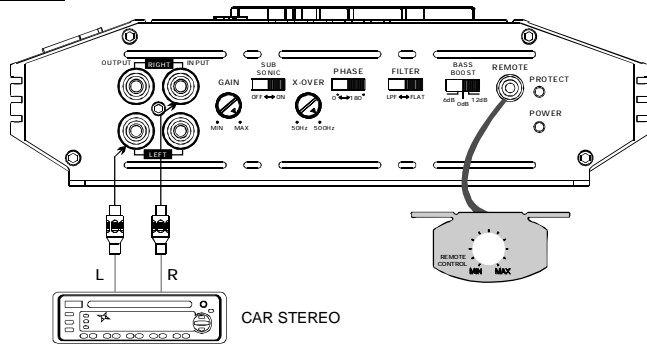


INPUT MODE

5 CHANNEL



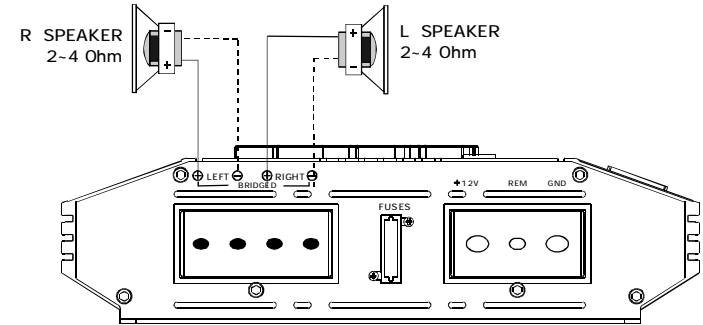
1 CHANNEL



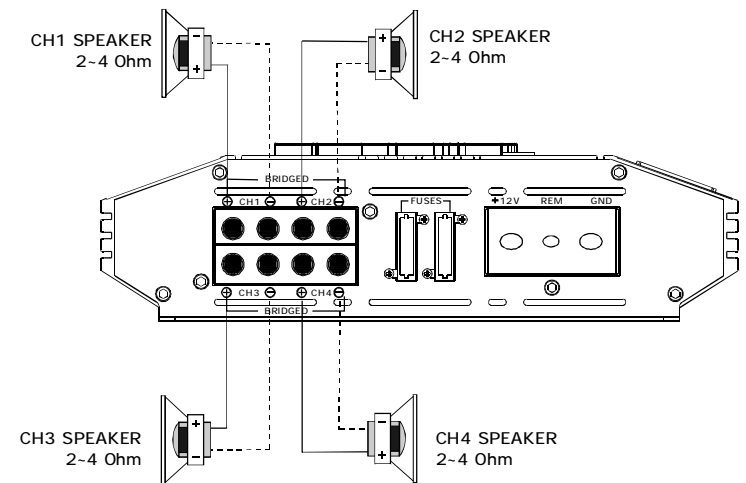
Our LW amplifier now offer you the ultimate in sound-shaping ability, with the inclusion of a bandpass filter.

SPEAKERS CONNECTIONS

2 CHANNEL STEREO LW2.240

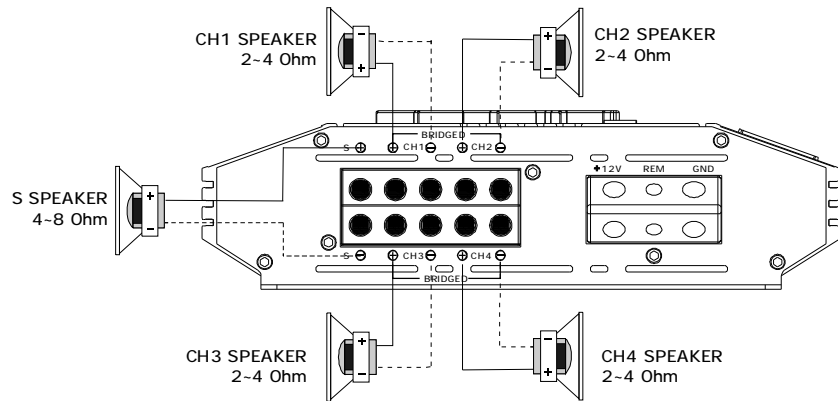


4 CHANNEL STEREO LW4.480/LW4.580

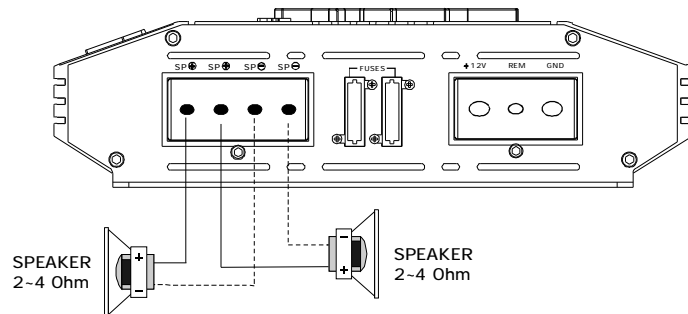


SPEAKERS CONNECTIONS

5 CHANNEL STEREO LW5.830



1 CHANNEL STEREO LW1.350



When utilizing the 5 Channel Mode, please use an specified inductor (blocking-coil) in series with the 5th Channel (sub).

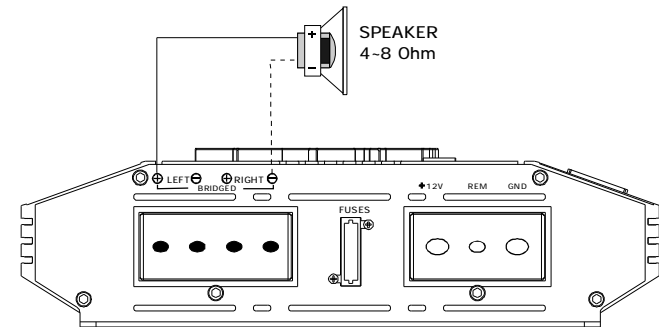
In order to prevent impedance overload and Frequency Distortion issues.

As in all multiple speaker connections, please always observe polarity as failure to do so, can cause phase cancellation.

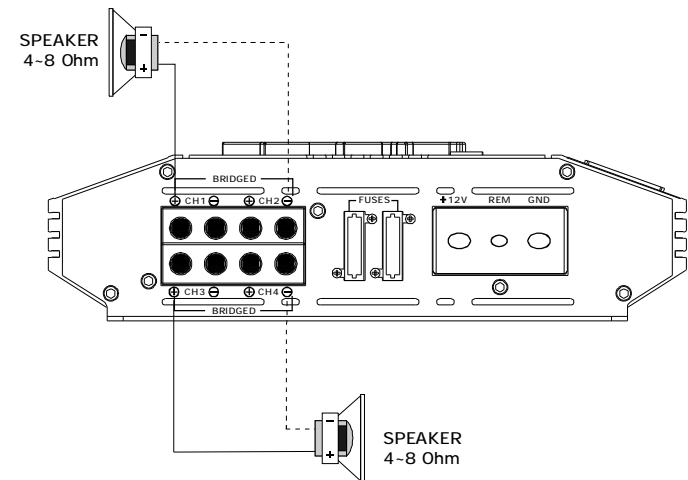
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BRIDGED MODE

2 CHANNEL BRIDGED LW2.240



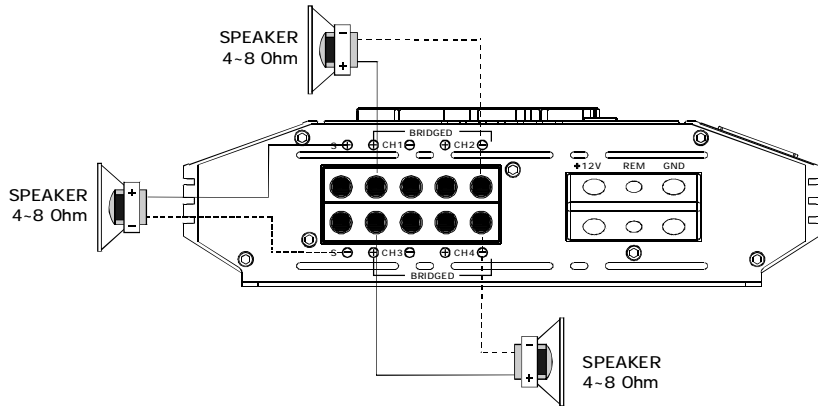
4 CHANNEL BRIDGED LW4.480/LW4.580



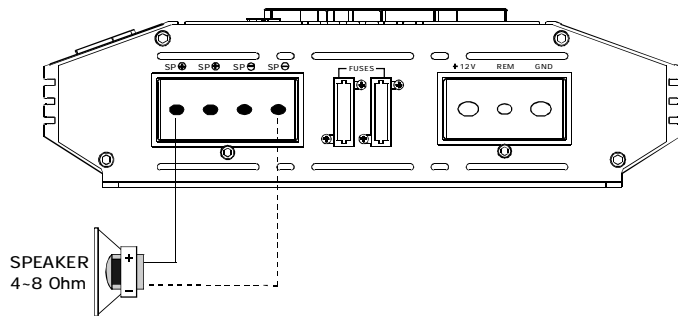
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BRIGDED MODE

5 CHANNEL BRIDGED LW5.830



1 CHANNEL BRIDGED LW1.350



As in all multiple speaker connections, please always observe polarity as failure to do so, can cause phase cancellation.

TROUBLE SHOOTING

NO SOUND

Is the LED lit?

YES

NO

Check Power and Remote turn-on wire for voltage. Make sure Ground wire is secure.

STILL NO SOUND

See your Authorized Sound Stream Dealer.

SOUND IN ONE CHANNEL ONLY

Reverse left and right speakers by unplugging the speaker connector, turning it over and plugging it back in.

SOUND IS NOW IN

OPPOSITE CHANNEL
Reverse RCA inputs

SAME CHANNEL
Problem is in the speaker of speaker wire of the silent channel

SOUND IS NOW IN

OPPOSITE CHANNEL
Reverse RCAs at head unit

SAME CHANNEL
Problem is in the Amplifier. See your local Authorized

SOUND IS NOW IN

OPPOSITE CHANNEL
Problem is in the head unit or before the amplifier

SAME CHANNEL
Problem is in the RCA cables

PROTECTION CIRCUIT

Short Circuit Protection engaged: The amplifier will turn off and try to come back on immediately. The amplifier will cycle like this indefinitely, with "blips" of sound each time. If this is the case, check your speakers and wiring for low impedance and short circuits.

Thermal Protection engaged: The amplifier will turn off and several minutes later will come back on. In this case, ensure that there is nothing blocking the normal convective airflow of the amplifier. No obstruction should be within 2" of the amplifier on all sides.

NOTE: Low battery voltage will cause the amplifier to run warmer and possibly damage the amplifier.



SOUNDSTREAM[®]
T E C H N O L O G I E S

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